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F. V. HAYDEN, U. S. Geologist-in-Charge.

AN ACCOUNT

OF THE VARIOUS PUBLICATIONS RELATING TO

THE TRAVELS OF LEWIS AND CLARKE,

WITH A

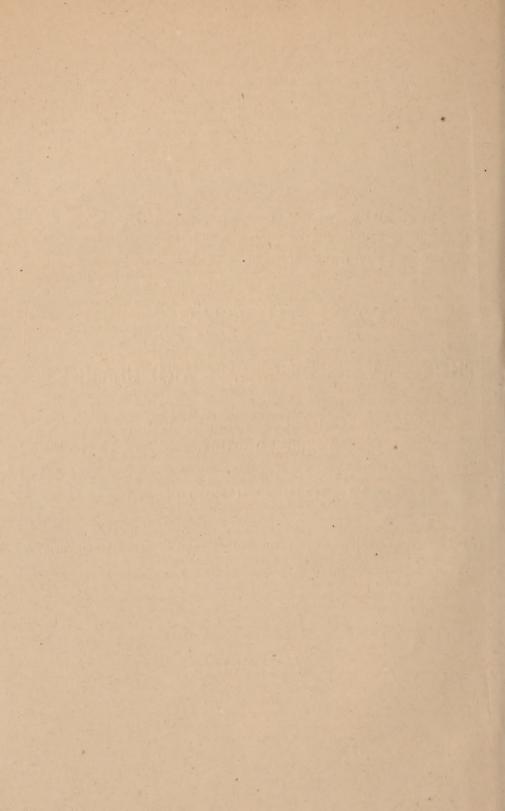
COMMENTARY ON THE ZOOLOGICAL RESULTS OF THEIR EXPEDITION.

Dr. ELLIOTT COUES, U. S. A.

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AN ACCOUNT OF THE VARIOUS PUBLICATIONS RELATING TO THE TRAVELS OF LEWIS AND CLARKE, WITH A COMMENTARY ON THE ZOOLOGICAL RESULTS OF THEIR EXPEDITION.

By Dr. Elliott Joues, U. S. A.

PART I.—BIBLIOGRAPHICAL.

Publication of the results of this memorable undertaking was attended by the untoward circumstances that neither of the persons chiefly concerned became the ostensible author, and that, pending the preparation of their unfinished MSS. for the press at other hands, two separate sources of incomplete information respecting their travels became available. These were eagerly seized by publishers, who appreciated the lively and general interest which the intrepid explorers had awakened. The result has been the appearance of a number of books of the most diversified character, all of which, nevertheless, purport to be, in one way or another, the "Narrative," "Travels," or "Journey," of "Lewis and Clarke," though the claim of the majority of them to be so considered rests upon slight foundation. The bibliography of the subject, if not more extensive than would be expected, is in a confused state, and quotation of Lewis and Clarke has become impossible without explicit reference to some particular edition.

Having frequent occasion to consult the work in its bearing upon the zoology of the West, a subject now undergoing searching scrutiny at many able hands, I have been led to examine the matter with some care, and with the result here presented, which, it is hoped, may tend to place the subject in clearer light. I have examined most of the

editions, and am able to give the titles of others not seen.

Probably the best account extant of these books is that contained in Thomas W. Field's "An Essay towards an Indian Bibliography," &c. (New York, 8vo, 1873.) The author, however, includes none of the foreign versions, and omits several others I have seen.—And here I would add that, in the arid wilderness of titles, often imperfect if not erroneous, which compose the average catalogues of books, it is refreshing to meet with such a model piece of bibliography as this masterly work of Mr. Field's.

All of the numerous editions and versions of "Lewis and Clarke" which I have seen or heard of may be traced to one or another of three sources,

namely:-

I. The Jefferson Message and Accompanying Documents. (1806.)

II. The Gass Journal. (1807.)

III. The Biddle-Allen History of the Expedition. (1814.)

Of these, the last named alone is the complete, authentic, and authorized account, prepared from the original MSS. of Lewis and Clarke. The Gass Journal is a perfectly authentic narrative of the journey, by a non-commissioned officer attached to the party, but is not a "Lewis and Clarke." From Jefferson's official communication, which is, of course, exactly what it purports to be, have sprung a number of books to which the names of Lewis and Clarke are more or less prominently attached; all of which are, nevertheless, spurious as far as they claim to No. 6——1

be narratives of the expedition. These three classes of books will be successively considered.

I.—THE JEFFERSON PRODROME AND THE APOCRYPHA.

On the 19th of February, 1806, the expedition being then still in progress, President Jefferson addressed to Congress a communication, entitled as follows:—

[1806.] Message | from the | President of the United States | communicating | Discoveries | made in exploring | the Missouri, Red River and Washita, | by | Captains Lewis and Clark, Doctor Sibley, | and Mr. Dunbar; | with | a Statistical Account | of the | Countries adjacent. | — | February 19, 1806. | Read, and ordered to lie on the table. | — | City of Washington: | A.& G. Way, printers. | . . . | 1806. 8vo. pp. 1-171, 3 l. (State Papers.)

It is necessary to examine this article closely, in order to see how the apocrypha depend upon it. The "message" itself is a curt official letter. Next comes a semi-official letter to the President from Captain Lewis, dated Fort Mandan, April 17, 1805, giving a progress-report of the expedition at that date, &c. "A Statistical View of the Indian Nations inhabiting the Territory of Louisiana* and the Countries Adjacent to its Northern and Western Boundaries," by Captain Lewis, is the second of the accompanying documents; an elaborate set of statistics of various tribes, with miscellaneous particulars. It is these last, patched together, that constitute the "Statistical View" printed in the various apocrypha. The third paper is Dr. Sibley's "Historical Sketches of the Several Indian Tribes in Louisiana, south of the Arkansa River, and between the Mississippi and the River Grand." These "Sketches" are transferred lodily, with some abridgment and mutilation, to the apocrypha. The fourth article consists of "Observations made in a Voyage commencing at St. Catharine's Landing, on the East Bank of the Mississippi, proceeding downwards to the Mouth of Red River, and from thence ascending that River, the Black River, and the Washita River from the Journals of William C. Dunbar, Esq., and Dr. Hunter." With omission of some meteorological tables appended to the original, this document, like Dr. Sibley's, is introduced into the apocrypha with little change.

The President's message and accompanying documents also appear, without the same caption, and otherwise modified in form, in other official archives of Congress. The same year, 1806, it was again reprinted in New York, as a pamphlet, which I have not seen; the title of which, nearly identical with that of the original, except as relates to the imprint, is kindly furnished by Mr. F. B. Perkins, of the Boston Public

Library, as follows:-

[1806.] Message | from the | President of the United States, | communicating | Discoveries | made in exploring the | Missouri, Red River and Washita, | by | Captains Lewis and Clarke, Doctor Sibley | and Mr. Dunbar; | with | a Statistical Account | of the | Countries adjacent. | — | Read in Congress, February 19, 1806. | — | New-York: | Printed by Hopkins and Seymour, | and sold by G. F. Hopkins, No. 118, Pearlstreet. | — | 1806.

One vol. 8vo, pp. 128+1 folded l. not paged.

^{*} On Captain Lewis's map, the name "Louisiana" lies across the present northern boundary of the United States.

From this official prodrome,* the earliest available source of muchdesired information, books quickly sprung, which, however modified in title or in substance with successive editions, are essentially the same. These are mostly anonymous as to author, compiler, or editor, being clearly publishers' enterprises; and, though containing matter of intrinsic merit and interest for the time, they are all, as just stated, spurious in as far as they pretend to be the narrative of Lewis and Clarke, and therefore properly to be styled the apocrypha. These books consist chiefly of accounts of the Indians, variously compiled from the three sources indicated in the President's message. The titles and captions of some of them are well contrived to make them appear as the work of our authors. The apocrypha were not wholly superseded by the appearance of the genuine narrative in 1814, but continued to be published at least until 1840, though they are now becoming scarce and are seldom if ever quoted. The earliest one of them I have seen (one which, however, purports to be no more than it really is) was printed in London the year following the President's message and accompanying documents, of which it is a literal reprint ("nearly an exact copy," says Field), under a modified title, as follows:-

[1807.] Travels | in the | Interior Parts of America; | communicating | Discoveries | made in Exploring | the Missouri, Red River and Washita, | by | Captains Lewis and Clark, | Doctor Sibley, | and | Mr. Dunbar; | with | a statistical account | of the | Countries adjacent. | — | As laid before the Senate, | by the | President of the United States. | In February, 1806, | and never before published in Great Britan. | — | London: | Printed for Richard Phillips, 6, Bridge Street, | Blackfriars, | By J. G. Barnard, 57, Snow-hill. | — | 1807.

8vo. pp. 1-116, with a folding table. Forming a part, separately paged, of Vol. VI. of Phillips's "Collection of Modern and Contemporary Voyages," &c.

Of this book, Field remarks, somewhat quaintly, "It is one of a series of travels published by Sir Richard Phillips, bookseller and baronet, who is the only example I recollect of that combination of trade and title."

Two years subsequently, in 1809, two editions of the apocrypha appeared simultaneously in England and America. To judge by their titles, and from what I can learn of the English one, they are very similar, if not identical. I do not know the inside history of these two anonymous books in their mutual relations, nor which has actual priority; but I should suppose that the English was taken from the American, just as the Rees edition of the authentic narrative was from the Biddle-Allen one. As transcribed by Rees, the title is somewhat abbreviated; the fuller title, as given by Field, is as follows:—

^{*}Among collateral publications bearing on the subject may be noticed the following State Paper—in some evidence against the proverbial ingratitude of republics:—

^{[1807.] &}quot;Documents accompanying a Bill making compensation to Messieurs Lewis and Clarke, and their companions, presented the 23d January 1807. Washington: A. & G. Way. 1807." 8vo. pp. 1-3.

[[]Grants of land to the whole party. Captain Lewis was soon after made governor of "Louisiana"; Captain Clarke, general of Louisiana militia and agent for Indian affairs.]

[1809.] "The Travels of Cap's Lewis and Clarke, from St. Louis, by way of the Missouri and Columbia rivers, to the Pacific Ocean; performed in the years 1804, 1805, and 1806, by order of the government of the United States, containing delineations of the manners, customs, religion, &c. of the Indians, compiled from Various Authentic Sources, and original Documents, and a Summary of the Statistical View of the Indian Nations, from the official communication of Meriwether Lewis. Illustrated with a Map of the Country, inhabited by the Western Tribes of Indians-8vo, pp. ix and 309. London, 1809."

This publication, which I have not seen, is said by Rees to contain "the principal part of Captain Lewis's Statistical View of the Indian Nations of Louisiana [i. e., of the West at large], together with Dr. Sibley's Account of the Indians on the Arkansaw, &c., and Mr. Dunbar's and Dr. Hunter's Account of the Washita River." Mr. Rees continues: "As far as relates to Lewis and Clarke's Travels, this work is not, however, what it pretends to be, for it contains no further account of them than was given in the above message [i. e., President Jefferson's], and some private letters of Captain Clarke, addressed to his friends before and after his return. But, in other respects, it is of considerable value, the other documents inserted in it being curious, and contained in no other English publication."

The corresponding American edition, in 12mo, of 1809, which is not noticed by Field, but of which I have several copies before me, is as

follows:-

[1809.] The | Travels | of | Capts. Lewis & Clarke, | by order of the | Government of the United States, | performed in the years 1804, 1805, & 1806, | being upwards of three thousand miles, from | St. Louis, by way of the Missouri, and | Columbia Rivers, to the | Pacifick Ocean: | Containing an Account of the Indian Tribes, who inhabit | the Western part of the Continent unexplored, | and unknown before. | With copious delineations of the manners, cus- | toms, religion, &c. of the Indians. | Compiled | From various authentic sources, and Documents. | To which is subjoined, | A Summary of the Statistical View of the Indian | Nations, from the Official Communication of | — | Mericether Lewis. | — | Embellished with a Map of the Country inhabited by | the Western Tribes of Indians, and five Engravings | of Indian Chiefs. | — | Philadelphia: Published by Hubbard Lester. | | 1809. | Price — 1 dollar 62½ cts. |

One vol., 12mo, pp. i-xii, 13-300, pll. 5, map, and tail-piece (scroll and pen.) (Copyright dated April 17, 1809.)

The composition of this wretched little meretricious compilation is of the most thoroughly motley character, showing that the art of bookmaking was highly developed at least as early as 1809. In the first place, the typography of the title-page is ingeniously so arranged as to make it appear, at first sight, that Meriwether Lewis is the author. The title-page is followed by Lester's copyright. Then comes the "recommendation" from President Jefferson, artfully twisted into a recommendation of the book itself. A mutilated version of Jefferson's

"message" succeeds. Then comes the compiler's introduction, consisting of some meditations on the value of geographical knowledge, and a statement, from some person unknown, of the commerce of the Missouri. The running-heads of the pages to p. 153 read, "New Travels among the Indians." This part of the book is meant to pass for Lewis and Clarke's narrative; the anonymous compiler audaciously opens with the now familiar "On the 14th of May, 1804, we embarked from St. Louis," &c.; but it is in no sense what it purports to be. Where the materials came from, I cannot make out; they were not in Jefferson's message and documents, and do not appear to be from Gass, and I do not know what other sources of supply were available at that date. But, at any rate, it is not Lewis and Clarke, though some private letters of the latter, doubtless authentic, are introduced (pp. 23-35). A fine snake story is brought in (pp. 39-40): the reptile "was in bulk half as large as a middle-sized man." From p. 119 to p. 153 is an account of the Knisteneaux and Chepewyan Indians, from the pen of A. Mackenzie. Then comes the "Statistical View," pp. 154-178; this is a mutilated compilation of parts of Captain Lewis's paper, furnished to the President. Similarly, the "Historical Sketches," which follow, pp. 179-204, are a mutilated abridgment of Dr. Sibley's paper. Pages 204-228 consist of an account of the origin of the Indians, by "an ingenious traveller." This part of the book likewise has no connection whatever with Lewis and Clarke. Thence to p. 292 are Mr. Dunbar's and Dr. Hunter's "Observations" on the Washita, &c. The volume closes with some anecdotes, one of which is the story of "Master Neddy," copied from William Buchan's "Domestic Medicine," and not having the most remote connection with anything that precedes. Yet this is the book which, with its several offspring, doubtless many thousand worthy American citizens and loyal British subjects have read for "Lewis and Clarke"—and, indeed, it is a very readable book.

We have next to notice two Baltimore editions of the apocrypha, published by Fisher. None of the regular editors of Lewis and Clarke allude to these books, nor are they represented in Field's bibliography. I have before me two editions, of 1812 and 1813; their titles are as fol-

lows:-

[1812.] An | Interesting Account | of the | Voyages and Travels | of | Captains Lewis and Clark, | in the years 1804, 1805, and 1806. | Giving a faithful description of the river Missouri and | its source—of the various tribes of Indians through | which they passed— | manners and customs—soil—climate | —commerce—gold and silver mines—animal and vege- | table productions interspersed with very enter- | taining anecdotes, and a variety of other useful and | pleasing information remarkably calculated to de- | light and instruct the readers—to which is added a | complete dictionary of the Indian tongue. | By William Fisher, Esq. | — | Baltimore. | Printed by Anthony Miltenberger, For the purchasers. | 1812. One vol., 12mo, 2 portraits, pp. v-xv, 16–326.

[1813.] An | Interesting Account | of the | Voyages and Travels | of | Captains Lewis and Clarke, | in the years 1804-5, & 6. | Giving a faithful description of the river Missouri and | its source—of the various tribes of Indians through | which they passed—manners and customs—soil | —climate—commerce—gold and silver | mines—animal and vegetable | productions. | Interspersed | With very entertaining anecdotes, and a variety

of | other useful and pleasing information, re-| markably calculated to delight and | instruct the readers. | To which is added | A complete Dictionary of the Indian tongue | — | by William Fisher, Esq. | — | Baltimore: | printed and published by P. Mauro, | N° 10, North Howard St. | 1813.

One vol., 12 mo, portraits?* pp. iii-xii, 13-262, with 3 full-page wood cuts.

William Fisher, esq., must have been a bold man, and he may not have been a bad man too. Whereas the compiler, or editor, or whatever he may have been, of the editions of 1809 retired behind an anonym, William Fisher not only stole his production bodily, and gave it another name, but also formally announced himself as the author of the same; for the edition of 1812 is a literal reprint, as nearly as may be, of that of 1809—even to the snake story and Master Neddy. The edition of 1813 is nearly another reprint; the title reads substantially the same, though the typography of the title-page is entirely different. In this edition, Master Neddy is dropped. The edition is notable as the first of this series of apocrypha which was illustrated. The smiling faces of "Captains Lewis and Clarke, returned" greet us; we have a tragic scene of an Indian "destined to death" by the flames; a thrilling view of a man with a bear behind and a precipice in front, &c. William Fisher does not appear to have possessed the copyright of this production.

In the interval between 1813 and 1840 there may have been, and probably were, other editions of the apocrypha; but the following, published by Ells at Dayton, Ohio, 1840, is the only one I have seen or heard of:—

[1840.] The | Journal | of | Lewis and Clarke, | to the Mouth of the Columbia River | beyond the Rocky Mountains. | In the years 1804-5, & 6. | Giving a faithful description of the River Missouri | and its source—of the various tribes of Indians | through which they passed—manners and cus- | toms—soil—climate—commerce—gold and | silver mines—animal and vegetable | productions, &c. | New Edition, with Notes. | Revised, corrected, and illustrated with numerous | wood cuts. | To which is added | a complete dictionary of the Indian tongue. | — | Dayton, O. | Published and sold by B. F. Ells. | John Wilson, printer | | 1840. One vol., 16mo, pp. i–xii, 13–240, portraits of Lewis and of Clarke,

and 14 other full-page woodcc.

The advertisement of the "proprietor" of this edition says: "The great demand for the Journal of Lewis & Clarke, has induced the republication of the work, with the additions of extensive and interesting notes, and numerous illustrations on wood. We have divided the work into Chapters, with appropriate captions, corrected much that was erroneous in the Topography, and especially in the Nomenclature and Orthography of the Proper Names, and the Philological errors (of which there were many,) have been corrected, where it could be done, without too materially infringing the text." But this volume, aside from some changes in the general make-up, addition of table of contents, insertion of wood-cuts, and the minor points noted in the advertisement just quoted, is the same as its prototype of 1809, notwithstanding the notable modification of title, by which it attempts to lay still stronger claim to be the authentic "Narrative," and by which perhaps it acquired

^{*}In the copy examined, whatever may have preceded the title-page is torn out.

an undeserved copyright. The running-heads of the pages, throughout the volume, are the words "Journal of Lewis & Clarke." The addition of "a complete dictionary of the Indian tongue," as per the title, is a false claim (as it was in Fisher's case), as this "dictionary" is simply the glossary of Knisteneaux words and phrases which was contained in the editions of 1809. The "notes" added would probably be called "extensive and interesting" only by the publisher. The volume closes with an "appendix," containing some irrelevant "anecdotes," not entirely the same as those of the 1809–1812–1813 editions; Master Neddy being replaced by a story about a "Great African Serpent, killed by Regulus the Roman General." The illustrations are most of them additional to any I have seen elsewhere; Captain Clarke still smiles on us, but his less fortunate companion looks as if he were really meditating suicide.

II.—THE GASS JOURNALS.

This publication is perfectly authentic, in the sense that it is exactly what it purports to be—a narrative of the expedition, by a known person who accompanied Lewis and Clarke, though it is not, nor does it pretend to be, the journal of his leaders. Patrick Gass was a sergeant of the command, and appears to have been an ignorant, intelligent, and observant person, who kept a diary of his own, in which events of the journey and their impressions upon the writer were recorded from day to day during the whole period. His general good character and the faithful and efficient service he rendered are formally certified by Captain Lewis. The Gass narrative is a plain, straightforward, and connected account. Paul Allen alludes to it, without mention of the writer's name, and with unnecessary depreciation, as the "least minute and valuable" of two journals, the other being kept by a brother sergeant, and, I think, never published. Thomas Rees speaks of it in a way more to my liking, as being "in general, sensible and judicious." It serves as a valuable check upon the narrative of Lewis and Clarke itself in the minutiæ of dates, names, places, &c., and on this account may not inaptly be termed a concordance.

Gass's work seems to have been entirely superseded by the publication of the regular narrative; at least, I know of no edition later than 1812. I learn altogether of five (and there was probably another) editions of this "concordance," namely: Pittsburgh, 12mo, 1807, and 8vo, 1808; London, 8vo, 1808; Philadelphia, 12mo, 1810 and 1812 (and French version, 1810?). Excepting the French, they only differ from each other in details of typography, and are virtually nothing more than reprints, though some of them are illustrated, the others not. The

original edition is as follows:-

1807.] A Journal | of the | Voyages and Travels | of a Corps of Discovery, | under the command of Capt. Lewis and Capt. | Clarke of the Army of the United States, | from | the mouth of the River Missouri through the | interior parts of North America | to the Pacific Ocean, | during the years 1804, 1805, & 1806. | Containing | An authentic relation of the most interesting transactions | during the expedition,—A description of the country,— | And an account of its inhabitants, soil, climate, euriosities | and vegetable and animal productions. | — | By Patrick Gass, | one of the persons employed on the expedition. | — | With geographical and explanatory notes | by the publisher. | — | [Copy-right]

secured according to law.] | Pittsburgh, | printed by Zadok Cramer, | for David M'Keehan, Publisher and | proprietor.... 1807. |

One vol., 12mo, pp. i-viii, 9-262. (No illustrations.)

There appears to have been another Pittsburgh edition, in 8vo, probably of 1808; the one from which a London edition was reprinted. The title as given by Field differs only from that of the 12mo, 1807, in the punctuation. Field describes it as "8vo. pp. 381. Pittsburgh, printed for David McKeehan; London, reprinted for J. Budd, 1808."

The next edition I know of appeared in Philadelphia, in 1810, as fol-

lows:-

[1810.] A | Journal | of the | Voyages and Travels | of a Corps of Discovery, | under the command of Capt. Lewis and Capt. | Clarke of the Army of the United States, | from | the mouth of the River Missouri through the | interior parts of North America, | to the Pacific Ocean, | During the Years 1804, 1805 and 1806. | Containing | an authentic relation of the most interesting transac | tions during the expedition,—A description of | the country,—And an account of its inhabi- | tants, soil, elimate, curiosities, and ve- | getable and animal productions. | — | By Patrick Gass, | one of the persons employed in the expedition. | — | With | geographical and explanatory notes. | — | [Copy-Right secured according to Law.] | — | Philadelphia: | Printed for Mathew Carey, | No. 122, Market-street. | — | 1810.

One vol., 12mo, pp. i-viii, 9-262, with 6 full-page wood cc.

The title of this edition is substantially the same as that of the foregoing, though the arrangement of the title page is quite different, as shown by the bars in the preceding paragraphs. The pagination is identical, and, in fact, the edition, as far as the text is concerned, is a mere re-issue, probably from the same plates, of the Pittsburgh 12mo of 1807; though the typography of pp. 9 and 11 is different. To this edition, however, are added six full-page wood-cuts, in which the figures of men, trees, and animals are notable rather for the mathematical regularity of their lines than for any approach to "curves of beauty."

This edition is said to have been re-issued at Philadelphia in 12mo, 1812. I have seen no copy bearing this date. The title, as quoted by Field, is substantially identical; the illustrations are continued. This is spoken of as the "fourth" edition; but if the London 8vo reprint of the Pittsburgh 8vo, 1808, be counted as one, then the Philadelphia

12mo of 1812 is at least the fifth, if not the sixth.

Before proceeding to the consideration of the regular authentic editions, I should notice a French version of a "Lewis and Clarke," known to me only by title, the date of which is given as 1810. Not having seen this book, I cannot say whether it is a version of the apocrypha or of the concordance. The major part of the title reads like the apocrypha, but the rest is more like Gass's Journal, of which, I suppose, this is a version. The title, as given by Quérard, is as follows:—

[1810.] "Voyages des capitaines Lewis et Clarke, depuis l'embouchure du Missouri jusqu'à l'entrée de la Colombia, dans l'Océan Pacifique, fait dans les années 1805-06, par ordre du gouvernement des États Unis, contenant le Journal des événements les plus remarquables du voyage, la de-

scription des habitants, du sol, les productions animales et végétales, etc.; trad. en français par A.-J.-N. L. (Lallemant). Paris, A. Bertrand, 1810, in-8, avec carte, 6 fr."

III.-THE AUTHENTIC NARRATIVE.

[1814.] History | of | The Expedition | under the command of | Captains Lewis and Clark, | to | the sources of the Missouri, | thence | across the Rocky Mountains | and down the | River Columbia to the Pacific Ocean. | Performed during the years 1804-5-6. | By order of the | Government of the United States. | Prepared for the press | by Paul Allen, Esquire. | In two Volumes. | Vol. I [II]. | Philadelphia: | Published by Bradford and Inskeep; and | Abm. H. Inskeep, Newyork. | J. Maxwell, Printer. | 1814.

Two vols., 8vo. Vol. I, pp. i-xxviii, 1-470, maps. Vol. II, pp. i-ix, 1-522, maps. (> Vol. II, Chap. VII, "A general description of the beasts, birds, and plants, &c. found by the party in this expedition," pp. 148-201.)

The editor's preface sets forth (not too fully) the circumstances under which the authentic MSS. of the work were prepared for the press. It had been, it appears, Captain Lewis's design to edit his travels himself. He commenced the work, and was en route to Philadelphia to complete it when his intention was frustrated by his tragic death. The papers were then deposited, after considerable delay, in the hands of Nicholas Biddle, who immediately proceeded to collect and investigate all the materials within his reach. The sources of information are thus given by Paul Allen: "Of the incidents of each day during the expedition a minute journal was kept by Captain Lewis or Captain Clark, and sometimes by both, which was afterwards revised and enlarged at the different periods of leisure which occurred on the route. These were carefully perused in conjunction with Captain Clark himself, who was able from his own recollections of the journey, as well as from a constant residence in Louisiana since his return, to supply a great mass of explanations, and much additional information with regard to part of the route which has been more recently explored. Besides these, recourse was had to the manuscript journals kept by two of the sergeants, one of which, the least minute and valuable, has already been published.* That nothing might be wanting to the accuracy of these details, a very intelligent and active member of the party, Mr. George Shannon, was sent to contribute whatever his memory might add to this accumulated fund of information. From these copious materials the narrative was sketched nearly to its present form, when" circumstances caused the transfer of the unfinished MSS, and accompanying documents to another editor, namely, Paul Allen, under whose superintendence the narrative in its final shape was published. To it is prefixed a "Life of Captain Lewis," by President Jefferson, embodying a certified copy of the official instructions under which he acted.

Thomas W. Field is severe upon Paul Allen, in this style: "At this stage [i. e., when Paul Allen undertook it] of the growth of the history Mr. Biddle from caprice, or business abstraction, abandoned its direc-

The allusion is here to Gass's journal. It is a significant fact that no reference is made to the books I have styled the "apocrypha."

tion, when his literary structure was nearly or quite complete. It was thus left for the editor, (whom popular esteem has credited with the labor of forming the work,) only to obtain a sketch of the life of Captain Lewis from President Jefferson, and to place his name on the title page. All of this he states in the Preface, but neglects to name the industrious and judicious editor who wrought the work ready to his hand; yet emblazons his own name in the place of honor on the title." I do not undertake to defend Mr. Allen for suppressing Mr. Biddle's name, in doing which, as well as in refraining from mention of Gass, he evinces a desire to place himself in solitary prominence in connection with the great work; but he certainly gained the right, moral and legal, to appear as the preparer of the work for the press after Mr. Biddle, "from caprice or business abstraction", had abandoned the under-

taking.

It is not within the scope of the present article to offer any general commentary or account, historical or critical, either of the nature of the expedition itself, or of the character of the work which was one of its results. The whole matter has passed into history, and the subject become "classic." I have already quoted the chapter of the work which alone bears formally and specially upon zoology, though incidental observations upon natural history are scattered throughout both volumes. In this connection, however, I should not omit to note a paragraph of the editor's preface by which it appears that a separate publication upon the natural-history observations and collections was then contemplated. Mr. Allen says: "The present volumes, it will be perceived, comprise only the narrative of the journey. Those parts of the work which relate to the various objects of natural history, observed or collected during the journey, as well as the alphabets of the Indian languages, are in the hands of Professor Barton, and will, it is understood, shortly appear." Having never seen or heard of any publication by Professor Barton on the subject, I am forced to the conclusion that this projet was never carried out. Thus it would appear that the net results of the expedition, as far as natural history is concerned, are contained in the single chapter above cited. This subject will be resumed after examination of the various subsequent editions of "Lewis and Clarke "* with which we have to do.

During the same year (1814), the work was published in London, under the editorship of Thomas Rees, in 1 vol. 4to, with the following title:—

[1814.] Travels | to the | Source of the Missouri River | and across the | American Continent | to the | Pacific Ocean. | Performed | by order of the Government of the United States, | in the Years 1804, 1805, and 1806. | — | By Captains Lewis and Clarke. | — | Published from the Official Report, | and | illustrated by a map of the route, | and other maps. | — | London: | Printed for Longman, Hurst, Rees, Orme, and Brown, | Paternoster-Row. | — | 1814.

[&]quot;The orthography of this name is uncertain. It is written "Clark" on the title, page of the present edition, but "Clarke" on that of nearly all the others examined. "Clarke" and "Clark" are both written by President Jefferson in his official communications, "Clarke" by Gass throughout his journal, and by Captain Lewis himself. Referring to the signatures of the private letters introduced in the "apocrypha," I find that the Philadelphia edition of 1809 prints the signatures "Clark," while in the Dayton edition of 1840 the signatures stand "Clarke." The balance of evidence is in favor of "Clarke."

One vol., 4to, pp. i-xxiv, 1-663,1 folding and 2 full-page maps. (> Chap. XXIV, "A general Description of the Beasts, Birds, and Plants, &c., found by the Party in this Expedition," pp. 450-489.)

"The present edition is printed nearly verbatim from the original; the sheets of which were forwarded to this country by the American proprietors: the only liberty that has been taken with the language, has been merely the correction of a few inadvertent grammatical or typographical errors. The American copy contained an Appendix drawn up by Captain Lewis on the State of the Indian Nations; but as the subject is altogether of a local nature, and the observations possess little interest for the British reader, it has been omitted." Besides the whole of the Appendix, which occupies 89 pages of the original, the Life of Lewis and the American editor's Preface are also omitted; in place of the latter being introduced a new preface by the English editor. This preface consists chiefly of a sketch of other explorations in the West, especially Lieutenant Pike's (which Rees had edited in 1811); it also includes President Jefferson's "Message," extract of a letter from Captain Lewis to the President, with bibliographical references to Jefferson's pamphlet of 1806, to the English edition (1809) of the apocrypha already quoted, and to Gass's Journal, which latter is spoken of in more complimentary terms than those used by the American editor. Excepting these points and those mentioned above in quotation-marks, this English 4to edition is identical with the original American one.

It was succeeded the next year by a 3-vol. 8vo reprint, as follows:—

[1815.] Travels | to the source of | the Missouri River | and across the | American Continent | to | the Pacific Ocean. | Performed by order of | the Government of the United States, | in the years 1804,1805, and 1806. | — | By Captains Lewis and Clarke. | — | Published from the Official Report, | and illustrated by a map of the route, | and other maps. | — | A new edition, in three volumes. | Vol. I. [II, III.] | — | London: | Printed for Longman, Hurst, Rees, Orme, and Brown, | Paternoster-Row. | 1815.

Three vols., 8vo. Vol. I, pp. i-xxvi, 1 l. not paged, 1-411, maps 3. Vol. II, pp. i-xii, 1-434, maps 3. Vol. III, pp. i-xii, 1-394. (> Vol. III, Chap. XXIV, "A general description of the beasts, birds, plants, &c., found by the party in this expedition," pp. 1-73.)

Except in form, and in some minor details of typography incident to resetting of the type, this is identical with the 4to edition of 1814.

This edition, convenient in form, and otherwise unexceptionable, is a favorite one, perhaps oftener met with, even in this country, than the

original of 1814.

It was re-issued under date of 1817, apparently from the same plates; though I observe, on the last two pages of vol. I, a slight discrepancy in the set of the type. If re-issued subsequent to 1817, as may easily have been the case, the fact has not come to my notice. These two English 3 volume 8vo editions of 1815 and 1817 may be quoted without distinction, as the pagination is the same.

Meanwhile, in the year 1815, the work was translated into German and published in that language. The abridged title of a German version, not seen by me, is thus given by Kayser; I regret that I am unable

to complete the title:-

[1815.] "(Lewis und Clarke.) Tagebuch e. Entdeckungsreise durch Nord. Amerika in d. Jahren 1804-6. Aus d. Engl. v. Weyland. Mit 1 Karte." «Neue Bibliothek der wichtigsten Beschreibungen, u. s. w. (Weimar, gr. 8vo.) Bd. I, 1815.

To judge from the title and date of publication, this is probably a version of the authentic narrative. It is the only German edition of which I have become aware.

The next edition of the authentic narrative is a Dutch version, by Van Kampen, published in three Svo volumes, at Dordrecht, 1816-18.

It is entitled as follows:-

[1816-18.] Reize | naar | de Bronnen van den Missouri, | en door het vaste land van America | naar de Zuidzee. | Gedaan op last van de Regering der Vereenigde Staten van America, | in de jaren 1804, 1805 en 1806. | Door de Kapiteins | Lewis en Clarke. | Met eene Kaart. | — | Uit het Engelsch vertaald door | N. G. Van Kampen. | — | Eerste [tweede, derde en Laatste] Deel. | * | Te Dordrecht, | Bij A. Blussé & Zoon. | 1816- [1817, 1818].

Three vols. Svo. Vol. I, 1816, pp. i-xxxii, 1-398, map. Vol. II.

1817, pp. i-viii, 1-390. Vol. III, 1818, pp. i-xii, 1-335.

This appears to be a fair and complete version, probably made from the English 3-volume edition of 1815 (Rees' preface being reproduced); the Dutch translator prefixes a preface of his own (Voorberigt van den Vertaler, pp. iii-xviii of vol. I.) Excepting this addition, the work

seems to be exactly reproduced in Dutch.

While this Dutch translation was in progress, there appeared an Irish edition at Dublin, in 1817. I have been unable to lay hands on a copy of this edition, in connection with the publication of which I have heard the familiar allusion to "Dublin pirates." The most precise information I have gained respecting it is given by Thomas W. Field, from which it would appear that it is the authentic narrative. Mr. Field says: "Another edition of Biddle's [i. e., "Paul Allen's"] history of Lewis and Clarke's expedition was printed in Dublin, under the same title as the London edition of three volumes, from which it was copied, with the addition on the title-page of.—'With the Life of Captain Lewis, by T. Jefferson, President of the United States of America.' In Two Volumes. Dublin, J. Christie, 1817. 8vo. Vol. I, prel. pp. xxxix.+588. Vol. II, prel. pp. xiv.+643+7 plates and map."

During the period from 1817 to 1842, there were no editions or reimprints of Lewis and Clarke that I know of. At the latter date, the Messrs. Harper and Brothers, having procured a copyright, made the first issue of a new and modified edition, prepared for them by the Rev. Dr. M'Vickar. There have been a great many (see beyond) successive re-issues of this handy little abridgment, all of which, however, appear to have been printed from the same plates. They are in fact the same edition, though in some of the copies I have seen the maps are omitted.

The following title is quoted from the issue of 1868:—

[1842-75.] History | of | the Expedition | under the command of | Captains Lewis and Clarke, | to | the sources of the Missouri, thence across the Rocky | Mountains, and down the River Columbia to the | Pacific ocean: performed during the | years 1804, 1805, 1806, | by order of the | Govern-

ment of the United States. | Prepared for the press | by Paul Allen, Esq. | Revised and abridged by the omission of unimportant de- | tails, with an introduction and notes, | by Archibald M⁴Vickar. | In two volumes. | Vol. I. [II.] | New York: | Harper & Brothers. Publishers, | Franklin Square. | 1868.

Two vols. 18mo, some of the issues forming part of Harpers' series, "The Family Library." Vol. I, pp. i-ri, i*-r*, vii-li, 53-371, 3 maps. Vol. II, pp. i-x, 11-395, 3 maps. (> Vol. II, Appendix, "Further enumeration and description of the Quadrupeds, Birds, Fishes, and Plants noticed during the Expedition," pp. 339-378.)

By the obliging attentions of the publishers themselves, I have been put in possession of the following memoranda of the dates of the successive issues, most of which consisted of 250 copies: September, 1842; January, 1843; May, 1843; January, 1844; July, 1845; April, 1847; May, 1850; August, 1851; June, 1855; April, 1858; November, 1860; February, 1868; March, 1871 (vol. II); April, 1872 (vol. I); February, 1874 (vol. II); December, 1875 (vol. I.)—in all fourteen issues of

the whole work, under sixteen different dates.

The advertisement of this edition, dated 1842, fully explains its character, in the following extract: "The work [i. e., the Biddle-Allen edition | being now nearly out of print, it seemed to the publishers a suitable time to put forth an edition of the Journal of Lewis and Clarke pruned of unimportant details, with a sketch of the progress of maritime discovery on the Pacific coast, a summary account of earlier attempts to penetrate this vast wilderness, and such extracts and illustrations from the narratives of later travellers, led by objects of trade, the love of science, or religious zeal, as the limits of the undertaking would allow. [The editor's, M'Vickar's, introduction, pp. vii-li of vol. I, consists of this matter.] The matter of the original journal is indicated by inverted commas, and where portions of it, embracing minute and uninteresting particulars, have been omitted, the leading facts have been briefly stated by the editor in his own words, so that the connection of the narrative is preserved unbroken, and nothing of importance is lost to the reader. . . . The seventh chapter of the second volume [of American edition of 1814], giving an account of the quadrupeds, birds, and plants found on the Columbia and its tributaries, has, to avoid unnecessary interruption of the course of the narrative, been transferred to the appendix."

This, then, is an editorial abridgment, or digest, of the original; faithfully, and, on the whole, judiciously executed. The natural-history chapter, besides being relegated to an appendix, is transposed as to its botanical and zoological portions, the botany coming first in the original, the zoology in the present edition; it is, furthermore, like the rest of the work, abridged at the editor's discretion, the omissions being indicated by asterisks; a new feature, moreover, is introduced, being foot-note references to the pages of the body of the work on which the various species were before mentioned. This is a valuable set of cross-references, for the narrative accounts scattered through the work are

often no less important than the formal notices themselves.

Résumé of the several publications noticed in the foregoing pages.

I. Jefferson's Message and accompanying documents, 8vo, Washington, A. & G. Way, 1805.—The same, 8vo, New York, Hopkins and

Seymour, 1806.—The same, Svo, London, R. Phillips, 1807.—The same, mutilated, abridged, and with irrelevant interpolation, Svo, London, 1809.—The same, 12mo, Philadelphia, H. Lester, 1809.—The same, with slight modification, 12mo, Baltimore, W. Fisher, 1812 and 1813.—The same, with slight further alteration, 16mo, Dayton, B. F. Ells, 1840.—8 editions,

II. Gass' Journal, 12mo, Pittsburgh, D. M'Keehan, 1807.—The same, "8vo, Pittsburgh, 1808" (not seen by me.)—The same, "8vo, London, J. Budd, 1808" (not seen by me.)—The same, 12mo, Philadelphia, M. Carey, 1810, and "1812" (latter not seen by me.)—The same (?), "8vo, Paris. A. Bertrand, 1810" (Frenc'i translation, not seen by me).—6

editions.

III. The Biddle Allen authentic narrative, 2 vols., 8vo, Philadelphia, 1814.—The same, 4to, London, T. Rees, 1814.—The same, 3 vols., 8vo, London, T. Rees, 1815 and 1817.—The same (?), "8vo, Weimar, 1815" (German translation, not seen by me).—The same, 3 vols., 8vo, Dordrecht, A. Blussé & Zoon, 1816–18 (Dutch translation).—The same, 2 vols., 8vo, Dublin, J. Christie, 1817 (not seen by me).—The same, abridged, with notes, 2 vols., 18mo, New York, Harper & Bro., 1842–75.—21 editions.

In all, 35 different imprints of the three series of books, about 20 of

which may be considered as bona file different editions.

Having thus traced the history of the numerous "Lewis and Clarkes," authentic, abridged, spurious, or collateral, I proceed to a commentary on the zoological results of the expedition, as far as concerns the mammals and birds, to which the authors' attention was mainly directed.

PART II.-ZOOLOGICAL.

The contribution to zoology made by Lewis and Clarke, though not extensive, shares the interest which attaches to every result of this unprecedented expedition, and assumes, moreover, great importance, in the fact that to it we owe our first acquaintance with a large number of species. It represented a decided advance upon the knowledge before possessed of this subject. Lewis and Clarke were the real discoverers. and actually the original describers, of many animals with which their names are seldom associated now in our acquired familiarity with the same species under names subsequently bestowed by others. were not trained naturalists, * nor naturalists at all, excepting in so far as good observers in any new field, keenly alive to the requirements of the case, become naturalists as a matter of course. Unfortunately for themselves, they imposed no scientific names, which throws them out of the case in questions of nomenclature. But their descriptions, characterized by a straightforward simplicity, and in general accurate, suffice for the identification of most of their species, and many of them are the whole basis of scientific terms afterward introduced into the system. These descriptions of physical characters are often accompanied by notices of habits, of geographical distribution, economic importance, &c. The authors seem to have paid more attention to the mammals and birds than to other classes of animals, and were certainly more successful in presenting them intelligibly. To these two classes, therefore, attention will be here confined.

It is my present purpose to notice in detail the several mammals and birds described by Lewis and Clarke, dwelling specially upon such as were discovered by them, or those upon which species were subse-

^{*} Thus, "shell-fish" (Mollusca) and whales are enumerated as fishes, and bats as birds.

quently established, whether rightly or not, in the recognized system of nomenclature.

It should be observed that attention is not to be restricted to the set of formal general descriptions gathered in the special part of the work above signalized; for scattered throughout the narrative are other accounts sometimes quite as much to the point. Nearly all the animals mentioned are, however, brought together in the chapter specially devoted to this purpose, though there are some notable exceptions.

The writer who imposed most of the names which have been based primarily and exclusively upon Lewis and Clarke was, as will be seen, Mr. George Ord. This was done in the zoological portion of the second American edition of Guthrie's Geography,* second volume, a work which appeared in 1815, thus immediately after the first authentic edition of the narrative. The article in question remained obscure, being seldom if ever quoted, until brought into its proper light by Prof. S. F. Baird, in his studies of American Mammals and Birds (1857 and 1858). About the same time, or shortly afterward, some of Lewis and Clarke's species fell in the way of C. S. Rafinesque, who also based some names, generic and specific, upon their descriptions, and in so doing gave trouble, much as usual. The narrative, becoming at once widely known, has continued to be freely cited to the present day.

In the account with which I continue, four leading editions of the authentic narrative are quoted by pages, and are severally distinguished

as follows :-

"Allen" signifies the original 2-vol. American edition, of 1814.
"Rees, 4to," signifies the first English edition, of the same date.
"Rees, 8vo," signifies the second English, 3-vol., 8vo edition, of 1815.

"Rees, Svo," signifies the second English, 3-vol., Svo edition, of 1815.
"M' Vickar" signifies the last American, 2-vol., 18mo edition, of 1842–775.

1.—Mammals.

Lewis and Clarke divide the quadrupeds of the country from the Rocky Mountains to the Pacific into (1) the domestic and (2) the wild. Of the former only the horse and dog are mentioned. Of (2) are given "the brown, white, or grisly bear, the black bear; the deer, common red deer, the black-tailed deer, the mule deer, the elk, the wolves, the large brown wolf, the small wolf of the plains, the large wolf of the plains, the tyger-cat, the foxes, the common red fox, the silver fox, the fisher or black fox, the large red fox of the plains, the kit-fox, or the small fox of the plains, the antelope, the sheep, beaver, common otter, sea-otter, mink, seal, racoon, squirrels, large gray squirrel, small gray squirrel, small brown squirrel, ground squirrel, braro, rat, mouse, mole, panther, hare, rabbit, polecat or skunk." (Allen, ii. 165.)

"Brown, White, or Grisly Bear."

Allen, ii. 165 (cf. op. cit. i. 200, 207, 214, 216, 265, 281; ii. 287, 303, 342, 395).—Rees, 4to, 462 (cf. op. cit. 147, 157, 158, 202, 208, 553, 565, 593, 632).—Rees, 8vo, iii. 25 (cf. op. cit. 273, 284, 292, 296, 362, 388;

^{*}This book is rare: I have seen but one copy. The title is "A new | Geographical Historical, | and | Commercial Grammar; | and present state of the | several Kingdoms of the World. | Containing, | [then follows summary of contents, &c., too long to quote]. Johnson and Warner. Philadelphia. 1815. 8vo. 2d vol. prel. pp., pp. 1-603, maps. Mr. Ord's zoological matter will be found at pp. 290-361. It consists of compiled nominal lists of vert-brates, followed by a general running account of some of them. Many new species are named, especially of mammals and birds.

iii. 193, 215, 294, 340, 341).—M·Vickar, ii. 340 (cf. op. cit. i. 189, 195, 198, 200, 227, 240; ii. 225, 235, 264, 299).

Ursus horribilis, Ord, Guthrie's Geog. ii. 1815, 291, 299. Ursus ferox, Richardson, Fn. Bor. Am. i. 1829, 24, pl. 1.

Ursus candescens, H. Smith, Griff. Cuv. ii. 1827, 229; v. 1827, 112; plate from Lewis and Clarke's specimen.

Lewis and Clarke's accounts furnish the basis of Ord's name. They are quoted by Richardson as authors of the name Ursus ferox; but as I fail to find any such name after diligent search in all the places of the several editions where the species is mentioned (vide the quotations above), it seems probable that "Ursus ferox" is merely a latin translation of the vernacular. The Grizzly Bear was found to be so numerous and so fierce, especially in the Upper Missouri region, as to form a serious impediment to progress, and an enemy that not seldom endangered the lives of members of the party. The authors carefully distinguish it from the following species, in all its great variety of color, which they are at pains to describe repeatedly, laying special stress upon size and form of the feet and claws, dimensions and general build, inability to climb tress, ferocity, and tenacity of life.

"Black Bear."

Allen, ii. 166.—Rees, 4to, 463.—Rees, 8vo, iii. 25.—M'Vickar, ii. 340. Ursus americanus, Pallas, Spic. Zool. xiv. 1780, and of authors. Black Bear, Pennant, Hist. Quad. 1781, No. 174; Arct. Zool. i. 1784, 57.

Referred by the authors to the common species of the United States; state of inhabit timbered portions of the Rocky Mountains, and borders of the Columbia Plains, as well as the tract thence to the Pacific.

" Common Red Deer."

Allen, ii, 166.—Rees, 4to, 463.—Rees, 8vo, iii. 26.—M'Vickar, ii. 341. Cervus macrourus, Rafinesque, Am. Month. Mag. i. 1817, 436. Cervus leucurus, Dougl., Zool. Journ. iv. 1829, 330.

Giving the habitat of this deer to be from the Rocky Mountains to the Pacific, the authors state that it does not appear to differ essentially from that of the United States (i. e., C. rirginianus), "being the same in shape, size, and appearance. The tail is, however, different, which is of unusual length, far exceeding that of the common deer. Captain Lewis measured one, and found it to be 17 inches long." The two names above quoted have been based upon this deer of the West: Douglas's referring more particularly to the Pacific animal, while Rafinesque's (which has priority) rests upon an uncertain description by Leraye, of an animal from the Missouri region. The great length of the tail ascribed by Lewis and Clarke has been found not to hold in all cases, the tail being usually but 12 or 14 inches long, and thus little more than that of the ordinary C. virginianus. Naturalists are now reverting to the original opinion of Lewis and Clarke that the animal cannot be specifically separated from the last named. For those who wish to recognize varietal distinction, the name macrourus of Rafinesque is available, having priority over leucurus of Douglas. The deer is given as C. virginianus macrurus by Dr. Yarrow and myself in a volume now about issuing from the press (December, 1875).

" Black-tailed Fallow Deer."

Allen, ii. 166.—Rees, 4to, 463.—Rees, 8ve, iii. 25.—M'Vickar, ii. 341. Cervus macrotis var. columbianus, Rich., Fn. Bor.-Am. i. 1829, 255, l. 20. Cervus lewisii, Peale, U. S. Expl. Exped. 1848, 39.

Cerrus richardsonii, Aud. and Bach., Qaad. N. Am. ii. 1851, 211;
iii. 1853, 27, pl. 106.

The authors correctly distinguish the Black-tailed Deer of the Pacific slopes from the Mule Deer, and were perfectly right in considering it as a distinct species. It seems to have been first named technically in 1829 by Richardson; it was subsequently dedicated by Peale to Captain Lewis, and afterward rededicated by Audubon and Bachman to Sir John Richardson.

" Mule-Deer."

Allen, ii. 167.—Rees, 4to, 463.—Rees, 8vo, iii. 27.—M·Vickar, ii. 341. Cervus macrotis, Say, Long's Exped. R. Mts. ii. 1823, 88.

In most parts of the West, this well-known and wide-ranging species is known chiefly as the "Black-tailed Deer," to distinguish it from the "White-tailed" (i. e., C. virginianus macrarus). The Columbian, or true Black-tailed Deer of Lewis and Clarke, having the same vernacular name, unnecessary confusion has always prevailed to some extent, especially among sportsmen and amateur naturalists. There are, however, three perfectly good species of deer in the West, precisely as originally discriminated by Lewis and Clarke, and as here given.

" The Elk."

Allen, ii. 167.—Rees. 4to, 464.—Rees, 8vo, iii. 27.—M·Vickar, ii. 341. Cervus wapiti, Barton, Trans. Am. Philos. Soc. vi. 1809, 70. Cervus major, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 292, 306. Cervus or Elaphus canadensis of authors.

"Large Brown Wolf."-"Large Wolf of the Plains."

Allen, ii. 167.—Rees, 4to, 464.—Rees, 8vo, iii. 27, 28.—M·Vickar, ii. 341, 342.

Lewis and Clarke are less fortunate in treating of the wolves, since they separate the single large species which exists into two, on the unsafe ground of color, and unite one of their varieties with the entirely different Coyoté (C. latrans). The mistake, however, might readily be made, since the Large Gray Wolf of the Plains, in its usual style of coloration, is almost identical with the Coyoté. No species, fortunately, appears to have been based directly upon Lewis and Clarke's account.

"Small Wolf of the Plains."

Allen, ii. 167.—Rees, 4to, 464.—Rees, 8vo, iii. 28.—M·Vickar, ii. 342. Canis latrans, Say, Long's Exped. R. Mts. i. 1823, 168, and of authors generally.

From what has been said, it will appear that Lewis and Clarke insufficiently distinguished this animal from the last, though they were perfectly familiar with it. It is carefully and fully described under the name of the "Small Wolf or Burrowing-Dog of the Prairies" in the body of the narrative (Allen, i. 207; Rees, 4to, 152; Rees, 8vo, i. 283; M*Vickar, i. 194). No species has been based upon their account.

"Tiger-Cat."

Allen, ii. 167.—Rees. 4to, 464.—Rees. 8vo, iii. 28.—M·Vickar, ii. 342. Lynx fasciatus, Rafinesque, Am. Month. Mag. ii. 1817, 46.

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Under the singularly misleading name of "Tiger Cat," the Lynx of the Northwest is elaborately described by the authors with minute accuracy. Rafinesque gave it the name of Lynx fasciatus, through a misunderstanding of the meaning of Lewis and Clarke, he supposing that they said the "back" was transversely striped, whereas it is evident from the context that they meant the back or inner side of the legs. The mistake is exposed by Baird (M. N. A. 1857, 98). The animal is now generally considered as a local race of the common Lynx rufus, though for many years rated as a distinct species.

"Large Red Fox of the Plains."

Allen, ii. 168.—Rees, 4to, 464.—Rees, 8vo., iii. 29.—M·Vickar, ii. 342.

I refrain from any further citation in this case, since it is uncertain whether the actual reference is to the common species, or to the larger and otherwise somewhat different animal called *Vulpes macrourus* by Baird, and *V. utah* by Audubon and Bachman.

"Black Fox."

Allen, ii. 168.—Rees, 4to. 465.—Rees, 8vo, iii. 29.—M'Vickar, ii. 342. Mustela canadensis, Schreber, Säug. iii. 1778, 492, pl. 144; and authors. Mustela pennantii, Erxleben, Syst. An. 1777, 479; and authors.

Better known under the name of "Fisher," also applied to it by the authors, who describe it sufficiently, and note its agility in climbing. Their use of the term "Black Fox" is to be carefully discriminated from any application of the term to the following variety of Vulpes fulvus.

"Silver Fox."

Allen, ii. 169.—Rees, 4to, 465.—Rees, 8vo, iii. 29.—M'Vickar, ii. 343. Canis argentatus, Shaw, Gen. Zool. i. 1800, 325. Vulpes fulvus var. argentatus of modern authors.

A well-known strain of the common species, though it should be noted that the actual reference may have been to the same state of pelage of *V. macrurus*. The authors note its rarity and beauty, and compare it with their "Large Red Fox."

"The Antelope."

Allen, ii. 169.—Rees, 4to. 465.—Rees, 8vo, iii. 430.—M·Vickar, ii. 343.

Antilope americana, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 292, 308.—Doughty's Cab. N. II. ii. 1833, 49, pl. 5 (from Lewis and Clarke's specimen in Phila. Mus).

Antilocapra americana, Ord, Bull. Soc. Philom. 1818, 146. and of

most authors.

It is certainly not a little singular that a large ruminant, which in the West yields only to the Buffalo itself in its abundance and the universality of its distribution, should not have been scientifically named until 1815; yet, for all I can discover to the contrary, such is the case. Lewis and Clarke were of course not its discoverers, nor are their accounts the earliest, since, for example, the animal was mentioned by Hernandez; yet the imposition of Ord's name along with several others based exclusively upon these authors makes them virtually the sponsors of the species upon its introduction to the system.

"The Sheep."

Allen, ii. 169.—Rees, 4to, 465.—Rees, 8vo, iii. 30.—M'Vickar, ii. 343. Ovis montana, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 292, 309. (Not of authors generally.)

Capra montana, Harlan, Fn. Amer. 1825, 253.

Aploceros montanus of modern authors.

Lewis and Clarke were perfectly well acquainted with the Bighorn or true Rocky Mountain Sheep, as is evident in several places in their Narrative. It is somewhat singular that it should not be included in the formal enumeration, since it inhabits the Rocky Mountains as well as the Upper Missouri region. But the "sheep" here referred to is the animal now known as the Rocky Mountain Goat, as evidenced by their mention of long, white wool and erect, pointed horns. Here, somewhat as in the case of the Antelope, the authors are sponsors of the species, having given one of the earliest, if not the first, perfectly recognizable account.

" The Beaver."

Allen, ii. 170.—Rees, 4to, 466.—Rees, 8vo, iii. 31.—M·Vickar, ii. 344. Castor fiber of early American authors.

Castor canadensis, Kuhl, Beit. Zool. 1820, 64, and most late American writers.

The account is chiefly occupied with the castor of the animal, mode of using it, &c.

"Common Otter."

Allen, ii. 171.—Rees, 4to, 467.—Rees, 8vo. iii. 32.—M·Vickar, ii. 344. Lutra canadensis, J. Sab., App. Frankl. Journ. 1823, 653. Lutra canadensis et californica, Bd., M. N. A. 1857, 184, 187.

Simply mentioned as the same as that of the United States.

" Sea Otter."

Lutra marina, Steller, Nov. Comm. Petrop. ii. 1751, 357, pl. 16. Enhydra marina, Fleming, Phil. Zool. ii. 1822, 187.

The authors give a fair description of this animal, then known, however, for more than half a century, from the account given by Steller.

"The Mink."

Allen, ii. 172.—Rees, 4to, 467.—Rees, 8vo. iii. 33.—M·Vickar, ii. 345. *Mustela vison*, Briss., Quad. 1756, 246.

Putorius vison, Gapper, Zool. Journ. v. 1830, 202, and of late authors generally.

"The Seal."

The description given by the authors does not afford means of identifying the species to which they refer.

"The Raccoon."

Allen, ii. 172.—Rees, 4to, 467.—Rees, 8vo, iii. 34.—M·Vickar, ii. 345. ? Procyon hernandezii, Wagler, Oken's Isis, xxiv. 1831, 514.

No description is given, and we can only suppose, from the locality, that the actual reference is to this species or variety.

"Large Gray Squirrel."

Allen, ii. 172.—Rees, 4to, 468.—Rees, 8vo, iii. 34.—M·Vickar, ii. 345. Sciurus fossor, Peale, U. S. Expl. Exped. 1848, 55. Sciurus heermanni, LeConte, Proc. Acad. Phila. 1852, 149.

As has been remarked by Professor Baird, it is not a little singular that an animal described with such detail by these authors was not named by early writers like Ord. Rafinesque, and Harlan, though other species were so promptly introduced into the system; but I have seen no name for the species earlier than that bestowed by Peale.

"Small Gray Squirrel."

Allen, ii. 173.—Rees, 4to. 468.—Rees, 8vo, iii. 35.—M·Vickar, ii. 345. ? Sciurus hudsonius var. 3, Rich., Fn. Bor.-Am. i. 1829, 190. ? Sciurus richardsoni, Bachm., P. Z. S. 1838, 100.

This animal is said to be common in all timbered portions of the Rocky Mountains. From the description, especially the mention of the black stripe along the sides, it is clearly one of the *S. hudsonius* group, but it is difficult to fix it precisely. As, however, the *S. douglassii* is the one evidently referred to under the name (see below) of "Small Brown Squirrel," we may suppose, upon the principle of exclusion, that by "Small Gray Squirrel" the authors meant the one subsequently named *S. richardsoni* by Dr. Bachman.

"Burrowing Squirrel."

Allen, ii. 173.—Rees, 4to, 468.—Rees, 8vo, iii. 35.—M·Vickar, ii. 346.

Arctomys columbianus, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 292, 303 (based on Lewis and Clarke).

Cynomys columbianus, Allen, Proc. Bost. Soc. Nat. Hist. 1874, p. —. Anisonyx brachiura, Ratinesque, Am. Monthly Mag. ii. 1817, 45.

Arctomys brachyura, Harlan, Fu. Amer. 1825, 304.

Arctomys lewisii, And. & Bach., Quad. N. A. iii. 1853, 32, pl. 107 (based on a specimen in Zool. Soc. Lond. labeled "Arctomys brachyura").

Cynomys gunnisonii, Baird, Proc. Acad. Phila. 1855, 334.

Notwithstanding that the authors' description of this animal is one of the most elaborate and extended of the whole series, it has occasioned misunderstanding, and given rise to numerous synonyms. The first author to take up the account seems to have been Ord, who bases his Arctomys columbianus upon the animal, and quotes Lewis and Clarke at length. In 1817, Rafinesque, upon a misconstruction of a phrase used by the authors, based his genus Anisonyx with the species A. brachiura. In treating of C. gunnisoni, which he had named in 1855, Professor Baird, in 1857, discussed the applicability of all these names to the Burrowing Squirrel of Lewis and Clarke, bringing the Arctomys lewisii of Audubon and Bachman into the same connection. Very recently, in his admirable review of the Sciurida, Mr. J. A. Allen has first collated the full synonymy, identifying the several supposed species here mentioned with the animal of Lewis and Clarke.

"Small Brown Squirrel."

Allen, ii. 174.—Rees, 4to, 469.—Rees, 8vo, iii. 37.—M·Vickar, ii. 347. Sciurus douglassii. Bachm., P. Z. S. 1838, 99.

Sciurus townsendii, Bachm. Journ. Acad. Phila. viii. 1839, 63.

Sciurus belcheri, Gray, Ann. Mag. N. H. X. 1842, 263. Sciurus suckleyi, Baird, Proc. Acad. Phila, 1855, 333.

The description given, like that of the "Small Gray Squirrel," clearly indicates a form of the S. hudsonius group, while the statement that the belly is "pale-red" would seem to fix the species as the same as that afterward successively described under the four different names above quoted.

"Ground Squirrel."

Allen, ii. 175.—Rees, 4to, 469.—Rees, 8vo, iii. 38.—M·Vickar, ii. 347.

? Tamias townsendii, Bachm., Journ. Phila. Acad. viii. 1839, 68. ? Tamias hindsii, Gray, Ann. Mag. N. H. x. 1842, 264.

? Tamias cooperi, Baird, Proc. Acad. Phila. 1855, 334.

The authors do not distinguish this animal from the common species of the United States, and give no description; it is only therefore to be presumed, from the locality, that they had this species of Tamius in view.

" " Barking Squirrel."

Allen, ii. 175.—Rees, 4to, 469.—Rees, 8vo, iii. 38.—M·Vickar, ii. 348. Arctomys ludoviciana, Ord, Guthrie's Geog. 2d. Am. ed. ii. 1815, 292, 302 (based on Lewis and Clarke).

Cynomys socialis, C. grisca, Rafinesque, Am. Monthly, ii. 1817, 45.

Arctomys missouriensis, Warden's Descr. U.S. v. 1820, 627.

Arctomys latrans, Harl., Fn. Amer. 1825, 306.

Cynomys ludovicianus of recent authors.

A full and excellent account of this species is given by the authors, who seem to have been the first to describe this species of Cynomys, as well as the foregoing one; and upon their account, quoted at length, Ord based his name.

" Sewellel."

Allen, ii. 176.—Rees, 4to, 470.—Rees, 8vo, iii. 39.—M·Vickar, ii. 348.

Anisonyx rufa, Rafinesque, Am. Monthly Mag. ii. 1817, 45.

Aplodontia leporina, Richardson, Zool. Journ. iv. 1829, 335: Fn. Dor.-Am. i. 1829, 211, pl. 18, C., f. 7-14, and of recent authors.

This curious animal, fully and pertinently described by Lewis and Clarke, was soon after named Anisonyx rafa by Rafinesque, whose name may require to stand, as it is based entirely upon Lewis and Clarke, though the generic term Anisony, arose in a misunderstanding of his, and rather bears upon Cynomys than upon Aplodontia.

"Braro."

Allen, ii. 177.—Rees, 4to, 471.—Rees, 8vo, iii. 40.—Blaireau, M. Vickar, ii, 349.

American Badger, Pennant, Arct. Zool. i. 1784, 71.

Meles taxus, var. americanus, Bodd., Elench. Anim. i. 1784, 136.

Ursus labradorius, Gm., Syst. Nat. i. 1788, 102.

Meles jeffersonii, Harl., Fn. Amer. 1825, 309 (based on Lewis and Clarke).

Under the term "Braro," evidently a corruption of the French "blaireau," and so corrected in the M'Vickar edition, the authors very fully describe the Badger, already well known, however, by previous accounts, though in 1825 a special name was based by Harlan upon their description.

46 The Rat."

Allen, ii. 178.—Rees, 4to, 471.—Rees, 8vo, iii. 41.—M·Vickar, ii. 350-(See also Allen, i. 289; Rees, 4to, 212—Rees, 8vo, ii. 396; M·Vickar, i. 244.)

Mus cinereus, Ord, Guthrie's Geogr. 2d Am. ed. ii. 1815, 292 (based

on Lewis and Clarke).

Neotoma cinerea, Baird, M. N. A. 1857, 499.

Myoxus drummondii, Rich., Zool. Journ. iii. 1828, 517.

Neotoma drummondii, Rich., Fn. Bor.-Am. i. 1829, 137, pl. 8.

Neotoma occidentalis, Coop., MSS.—Bd., Proc. Acad. Phila. 1855, 335; M. N. A. 1857, 496.

The bushy-tailed *Ncotoma* of the West is very clearly noted by the authors, who even institute comparisons between it and *N. floridana* of the South Atlantic States, with which Captain Lewis seems to have been also familiar. The description given at the earlier page above quoted is better than that in the formal enumeration. This animal is the basis of *Mus cinereus* of Ord.

" The Mouse."

Allen, ii. 178.—Rees, 4to, 472.—Rees, 8vo, iii. 42.—M'Vickar, ii. 350 No description; not identifiable.

" The Mole."

Allen, ii. 178.—Rees, 4to, 472.—Rees, 8vo, iii. 42.—M. Vickar, ii. 350.

Not described, nor distinguished from the common mole of the United States, though the actual reference is doubtless to the animal subsequently named Scalops townsendii by Bachman.

" The Panther."

Allen, ii. 178.—Rees, 4to, 472.—Rees, 8vo, iii. 42.—M'Vickar, ii. 350. Felis concolor, Linn., Mantissa, 1771, 522, pl. 2.

" The Hare."

Allen, ii. 178.—Rees, 4to. 472.—Rees, 8vo. iii. 42.—M·Vickar, ii. 42. Lepus virginianus, var., Harl., Fn. Amer. 1825, 310. Lepus virginianus, Rich., Fn. Bor.-Am. i. 1829, 224: not of authors. Lepus campestris, Bach., Journ. Phila. Acad. vii. 1837, 340.

Lepus townsendii, Bach., Journ. Phila. Acad. viii. 1839, 90, pl. 2.

The Hare described at length by Lewis and Clarke is one of the very large species called "Jackass Rabbits" in the West; it is also one of those which turn white in winter; and their explicit mention of the white tail seems to fix their species as that which has acquired the synonymy above quoted. In crossing the country, they must have become perfectly familiar with the now L. campestris, which is the characteristic species of Dakota and Montana; and, as they make no discrimination of a Pacific-side species different from that of the Missouri plains, it is fair to identify their account as is here done, although they may have actually included in it another species.

" The Rabbit."

Allen, ii. 179.—Rees, 4to, 473.—Rees, 8vo, iii. 44.—M·Vickar, ii. 351 Lepus nuttallii, Bach., Journ. Phila. Acad. vii. 1837, 345, pl. 22. Lepus artemisia, Bach., Journ. Phila. Acad. viii. 1839, 94.

The authors' account is brief and not descriptive; but the indication, coupled with the locality, leaves no doubt of the species they had in view.

" The Polecat."

Allen, ii. 179.—Rees, 4to, 473.—Rees, 8vo. iii. 44.—M·Vickar, ii. 351. Viverra mephitica, Shaw, Gen. Zool. i. 1800, 390.

Mephites chinga and M. americana of authors.

A short account of this animal, which, as the authors say, is the same as that of other parts of North America.

2.—Birds.

" The Grouse or Prairie-hen."

Allen, ii. 180.—Rees, 4to, 473.—Rees, 8vo. iii. 44.—M·Vicar, ii. 351. *Phasianus columbianus*, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 317 (based on Lewis and Clarke).

Pediocætes columbianus, Elliot, Proc. Acad. Phila. 1862, 403.

Pediacetes phasianellus, var. columbianus, Cones, Birds Northwest, 1874, 407.

? Tetrao phasianellus, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 317 (uncertain).

The authors' account is extended and sufficiently minute to show that they had in view the "Sharp-tailed Grouse," or Pediacetes phasianellus of writers who refer to the United States bird. In giving the name "Columbia Pheasant" to this bird (coupled with the technical term "Phasianus columbianus"), Ord must not be understood as quoting Lewis and Clarke; for no such name is found in their work: they give the bird under the caption above cited, and the "Pheasants" they speak of are species of Tetrao and Bonasa. The quotation of "the Columbia Pheasant of Lewis and Clarke" has been copied by several writers, myself among the number, evidently without looking up the original. As describers of the United States Pediacetes, Lewis and Clarke have probably priority; though the Arctic form, the true Tetrao phasianellus of Linnaus, had long before been recorded by other writers.

" Cock of the Plains."

Allen, ii. 180.—Rees, 4to, 473.—Rees, 8vo. iii. 45.—M·Vickar, ii. 352. Tetrao urophasianus, Bp., Zool. Journ. iii. 1828, 214. Centrocercus urophasianus of modern writers.

It is singular that Ord, in naming so many species of Lewis and Clarke's, should be entirely silent respecting this one, which they describe at length and with particularity, perhaps for the first time. The earliest name I have found for it is that of Bonaparte just given.

" Large Black and White Pheasant."

Allen, ii. 181.—Rees, 4to, 474.—Rees, 8vo. iii. 47.—M'Vickar, ii. 353

" Small Speckled Pheasant."

Allen, ii. 182.—Rees, 4to, 475.—Rees, 8vo, iii. 48.—M·Vickar, ii. 354.

" Small Brown Pheasant."

Allen, ii. 182.—Rees, 4to, 475.—Rees, 8vo, iii. 48.—M'Vickar, ii. 354.

Tetrao fusca, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 317.

Notwithstanding that the authors give extended accounts of their three kinds of Pheasants, the descriptions are not of a character to render them readily available for identification of the species. The first, the "large black and white" one, would be taken for Tetrao obscurus, or its variety richardsonii; but the mention of eighteen feathers in the tail, and of "tufts of long black feathers" on the neck, militates against this supposition, rather suggesting Bonasa. Nevertheless, the two following species are said to be only "half the size" of this first one, which could only be true if the latter were as large as T. obscurus. The descriptions of all three, in fact, seem to have been drawn up from memory, with some confusion of ideas; and, however they may finally be identified, I think such identification likely to remain merely opinionative. The "Small Brown Pheasant" is the only one of the three upon which a specific name has been established, it being the basis of Tetrao fusca of Ord. This name has been referred by some late writers with a query to Tetrao canadensis var. franklini, but I do not see anything in the original account which forbids us to suppose it intended for Bonasa umbellus var. sabinii. The name of Ord should not be employed as long as the uncertainty continues.

" The Buzzard."

Allen, ii. 183.—Rees, 4to, 475.—Rees, 8vo, 48. M·Vickar, ii. 354.

Vultur californianus, Shaw, Nat. Misc. ix. 1797, pl. 301. Cathartes californianus of recent authors in general.

Vultur columbianus, Ord, Guthrie's Geog. 2d Am. ed. ii. 1815, 315, (based on Lewis and Clarke).

Cathartes vulturinus, Temm., Pl. Color. 1820, 31.

Under the name of "Buzzard" the authors minutely describe the great Californian Vulture, which, though already provided with a name, was renamed by Ord, upon the strength of their description, and subsequently by Temminck, apparently upon some principle like stet pro ratione roluntas, for the last-named author was sufficiently aware that there was a prior designation.

" The Robin."

Allen, ii. 184.—Rees, 4to, 476.—Rees, 8vo, iii. 50.—M·Vicar, ii. 355. Turdus nævius, Gm., Syst. Nat. i. 1788, 817, and of authors. Turdus auroreus! Pall., Zoog. Rosso-As. i. 1831, 448. No. 87. Orpheus meruloides, Sw. & Rich., Fn. Bor.-Am. ii. 1831, 187, pl. 38.

Described with great particularity and with accuracy. Here given under the common name, which is more frequently used in connection with *Turdus migratorius*; the authors distinguish it from the latter, a little further on, as the "Columbian Robin."

" Crow and Raven."

Allen, ii. 185.—Rees, 4to, 477.—Rees, 8vo, iii. 51.—M·Vicar, ii. 356.

No description is given, and in fact the authors speak of the two birds as if they were one. An allusion to the small size of the Columbia River bird permits the supposition that they may have had *Corrus cuu-rinus* in partial view.

"The Hawks."

Allen, ii. 185.—Rees, 4to, 477.—Rees. Sve, 51. M. Vickar, if. 356.

The authors give no recognizable account of the several Hawks they treat of collectively in a single paragraph; though the allusion to the "blue wings" of one of them may be supposed to signify Circus.

" Large Blackbird."

Allen, ii. 185.—Rees. 4to. 477.—Rees, 8vo, iii. 51.—M'Vickar, ii. 356. Nothing on which to base even a surmise.

"Large Hooting Owl."

Allen, ii. 185.—Rees, 4to, 477.—Rees, 8vo. iii. 51.—M·Vickar, ii. 353.

May be supposed to refer to Bubo ringinianus, though there is nothing requiring such identification.

" Turtle Dove and the Robin."

Allen, ii. 185.—Rees, 4to, 477.—Rees, 8vo, iii. 52.—M'Vickar, ii. 356. Zenaidura carolinensis and Turdus migratorius.

" The Magpie."

Allen, ii. 185.—Rees, 4to, 477.—Rees, 8vo, iii. 52.—M·Vicar, ii. 353. *Pica hudsonica* of authors.

"Large Woodpecker or Laycock."

Allen, ii. 185.—Rees, 4to, 477.—Rees, 8vo. iii. 52.—M·Vickar, ii. 356.

"Laycock," though repeated in all the editions, is an evident misprint for "Logcock," a common name of *Hylatomus pileatus*.

The "Lark Woodpecker" mentioned without description in the same paragraph is not identifiable, but we may suppose it to be a *Colaptes*, from the resemblance of the black pectoral crescent to that of a *Starnella*, called Lark by the authors.

" The Lark."

Allen, ii. 186.—Rees, 4to, 477.—Rees, 8vo, iii. 52.—M·Vickar, ii. 356. Sturnella neglecta, Aud., B. Amer. 8vo ed. vii. 1843, 339, pl. 487.

" Flycatcher, of two species."

Allen, ii. 186.—Rees, 4to, 477.—Rees, 8vo, iii. 52.—M'Vickar, ii. 356.

Under this head, the authors describe two small birds, but not recognizably; I do not even pretend to say to what family they belong.

"Blue-crested Corvus."

Allen, ii. 186.—Rees. 4to. 478.—Rees. 8vo, iii. 53.—M·Vickar, ii. 357. Cyanura stelleri of authors.

"Small White-breasted Corvus."

Allen, ii. 186.—Rees, 4to. 478.—Rees, 8vo, iii. 53.—M·Vickar, ii. 357.

In the earlier editions the name is as given here; M·Vickar, upon what authority does not appear, has it "White-crested." I do not know what bird is intended by this, unless the authors refer to Cyanocitta.

" The Snipe, &c."

Allen, ii. 186.—Rees, 8vo, 478.—Rees, 8vo, iii. 53.—M^cVickar, ii. 357.

Two species are indicated, one of them probably Gallinago wilsoni, but neither of them certain.

(No. 17, the next "bird" mentioned by the authors, is the "Leatherwinged Bat," an unidentifiable species of mammal.)

" White Woodpecker."

Allen, ii. 186.—Rees, 4to, 478.—Rees, 8vo, iii. 53.—M·Vickar, ii. 356.

'Mention of the "red head" of this species would seem to indicate Melanerpes erythrocephalus, but as this species scarcely inhabits the country, if at all, the actual reference is more probably to Picus harrisi.

"Black Woodpecker."

Allen, ii. 187.—Rees, 4to, 478.—Rees, 8vo, iii. 54.—M·Vickar, ii. 357.

Picus torquatus, Wils., Am. Orn. iii. 1811, 31, pl. 20, f. 3.

Melanerpes torquatus, Bp., Consp. Av. i. 1850, 115.

Celeus torquatus, Woodh., Sitgreave's Rep. 1853, 90.
Asundesmus torquatus, Cones. Proc. Acad. Phila, 1863, 53.

" Picus lewisii, Drapiez."

Described at length and with great particularity. Before the publication of this work, the bird had already been described by A. Wilson from the specimens brought in by Captain Lewis, to whom the species was dedicated, though only by the vernacular name of "Lewis's Woodpecker." According to G. R. Gray, the term "Picus lewisii" was, however, subsequently introduced by Drapiez. I have not been able to lay hand on the reference.

In this connection, special attention is directed to a name, Picus montanus, established by Ord in 1815, (Guthrie's Geog. 2d Am. ed. ii, 1815, p. 316), and which has usually been quoted as a synonym of this species. Reference to the original, however, will show that it does not belong here at all. Ord quotes Lewis and Clarke (Allen edition, i. 398) as the basis of his species P. montanus. Turning to this place, we read, "Among the woods, Captain Clarke observed a species of woodpecker, the beak and tail of which were white, the wings black, and every other part of the body of a dark brown; its size was that of the Robin, and it fed on the seeds of the pine." Now this is an entirely different bird from any mentioned in the formal summary we are here considering. There is much reason to believe, though some terms of the description do not fit exactly, that the bird here meant is the Picicorrus columbianus, which has a white tail, black wings, the rest of the body ashy (not unlikely to be called "brown" from recollection), which feeds upon pineseeds, and the general habits and appearance of which strongly recall a Woodpecker; in fact, the bird has been mistaken for a Woodpecker by some scientific observers at least as late as 1872. At any rate, Picus montanus of Ord has nothing to do with P. torquatus. Is it possible that a species of *Picus*, with a white tail, remains to be discovered in the forests of the West? For we are instantly reminded, in this connection, of such a bird, described by the Prince Paul of Württemberg, under the name of Picus leucurus. But I am of opinion that this name also refers to the Picicorvus columbianus.

" Calamut (or Calumet) Eagle."

Allen, ii. 188.—Rees, 4to, 479.—Rees, 8vo, iii. 55.—M·Vickar, ii. 357.

Aquila chrysætos, melanætos, fulva, canadensis, regia, &c., of authors. The Golden Eagle of North America is described in detail by the authors under the above name. Their account is copied, or compiled, with comment, by numerous writers.

"Large Blue and Brown Herons, or Cranes."

Allen, ii. 189.—Rees, 4to, 479.—Rees, 8vo, iii. 56.—M'Vickar, ii. 358. Ardea canadensis, Linn., S. N. i. 1766, 234. Grus canadensis of authors.

" Fishing Hawk."

Allen, ii. 189.—Rees, 4to, 480.—Rees, 8vo, iii. 57.—M'Vickar, ii. 358. Falco or Pandion carolinensis of authors.

"Blue-crested or King-fisher."

Allen, ii. 189.—Rees, 4to, 480.—Rees, 8vo, iii, 57.—M'Vickar, ii. 358. Ceryle alcyon of authors.

"Gulls."

Allen, ii. 189.—Rees, 4to, 480.—Rees, 8vo, iii. 57.—M'Vickar, ii. 359. Four kinds are alluded to; none of them described.

" The Cormorant."

Allen, ii. 189.—Rees, 4to, 480.—Rees, 8vo, iii. 57.—M'Vickar, ii. 359. Graculus dilophus of authors.

This identification is permissible, from the authors' remark that the Cormorant is not different from that found on the Potomac River.

" The Loon."

Allen, ii. 189.—Rees, 4to, 480.—Rees, 8vo, iii. 57.—M'Vickar, ii. 359.

Two species of "Loon," one of them apparently a Grebe, are noted, but neither of them is recognizably described.

" White Brant."

Allen, ii. 190.—Rees, 4to, 481.—Rees, 8vo, iii. 58.—M'Vickar, ii. 359.

Anser hyperboreus, Pallas, Spic. Zool. viii. 1767, pl. 65, and of authors generally.

Very fully described in this place, and also earlier in the narrative (Allen, i. 206, &c.).

"Brown Brant."

Allen, ii. 191.—Rees, 4to, 481.—Rees, 8vo, iii. 59.—M·Vickar, ii. 359. Anas, Anser, or Berniela brenta of authors.

Fully described, and compared with B. canadensis.

" Pied Brant."

Allen, ii. 191.—Rees, 4to, 481.—Rees, 8vo, iii. 60.—M'Vickar, ii. 360.

Anser albifrons of American writers.

Anser gambeli, Hartl., R. M. Z. 1852, 7.

Like the other Brant, this species is described at length and with accuracy.

" Geese."

Allen, ii. 192.—Rees, 4to, 482.—Rees, 8vo, iii. 61.—M'Vickar, ii. 360.

These are said to be "either the large or small kind"; by the former being evidently meant the *Bernicla canadensis*, while the other refers, it is to be supposed, to *B. hutchensii*. Neither is well described.

" Swan, large and small."

Allen, ii. 192.—Rees, 4to, 482.—Rees, 8vo, iii. 61.—M'Vickar, ii. 360.

By their size and the difference in the voice, the two American species are correctly discriminated by Lewis and Clarke; unfortunately, however, they blunder in the matter by saying that the large species (i. e., the one subsequently called Cygnus buccinator by Sir John Richardson) is the same as that common on the Atlantic coast; whereas, it is their other species, here called by them the Whistling Swan, in contradistinction to the Trumpeter, that is found also in the Atlantic States. But this confusion must not be allowed to stand in the light of the main point of this case, which is, that, in 1815, Ord based his Anas columbianus exclusively upon the Whistling Swan of Lewis and Clarke, i. e., upon the smaller of the two species, subsequently named Cygnus americanus by Sharpless. The blunder of the original authors does not extend to Ord, to whose name columbianus should be restored its rightful priority.

"Duckinmallard."

Allen, ii. 193.—Rees, 4to, 483.—Rees, 8vo, iii, 62.—M'Vickar, ii. 360. Anas boschas of authors.

" Canvas-back Duck."

Allen, ii. 193.—Rees, 4to, 483.—Rees, 8vo, iii. 62.—M'Vickar, 360. Anas vallisneria of authors.

Red-headed Fishing Duck."

Allen, ii. 193.—Rees, 4to, 483.—Rees, 8vo, iii. 62.—M'Vickar, ii. 361. ? Filigula americana of authors.

"Black and White Duck."

Allen, ii. 193.—Rees, 4to, 483.—Rees, 8vo, iii. 63.—M'Vickar, ii. 361. Bucephala albeola of late authors.

" Black Duck."

Allen, ii. 194.—Rees, 4to, 483.—Rees, 8vo, iii, 63.—M'Vickar, ii. 361. Fulica americana, Gm., auct.

Very fully and accurately described.

" Divers."

Allen, ii. 194.—Rees, 4to, 484.—Rees, 8vo, iii. 64.—M'Vickar, ii. 361.

Under this head the authors describe two species of Podiceps, the larger one being perhaps P, occidentalis, Lawr., but the description of neither is sufficiently diagnostic.

"Blue-winged Teal."

Allen, ii. 195.—Rees, 4to, 484.—Rees, 8vo, iii. 65.—M'Vickar, ii. 361.

The paragraph beginning with this name goes on to describe a duck, apparently supposed, and intended to be considered, not as a Bluewinged Teal, but as some other species, for which no name is offered. The description, though lengthy, applies exactly to no species with which I am acquainted; but, from its general drift, I should suppose the authors had in view some species of Fulix, probably F. marila.

